IN THE SPECIFICATION:

Please amend the paragraph on page 1, lines 24-28 as follows:

- Lack of flow sensors which, if provided, would enable certain breathing circuit conditions to be easily ~~recognised~~ recognized and appropriate action to be taken by the humidification device (and/or the gases supply). Flow sensors have previously not been utilised in humidification systems due to insufficient robustness and problems of condensation occurring on the flow sensor, leading to incorrect flow readings.

Please amend the paragraph on page 4, lines 7-9 as follows:

Wherein said flow rate sensor housing is positioned up stream of said temperature sensor housing in order that heat produced by said flow rate sensor housing does not ~~effect~~ affect said temperature sensor housing.

Please amend the paragraph on page 7, lines 5-13 as follows:

In FIG. ~~1~~ 5 a gases mask 16 is shown over the patient's nose and mouth (referred to as "Intact Airways" gases delivery) however it should be understood that many gases delivery configurations exist such as intubation in which a delivery tube is positioned in the patient's trachea to by-pass the patient's airways (known as "Intubated Airways" gases delivery). It is also possible to provide a return path for the patient's exhaled gases back to ventilator 1. In this case a suitable fitting such as a "Y-piece" may be attached between the patient (13), inspiratory conduit (14) and an expiratory conduit (not shown) which is connected to an inlet (not shown) of ventilator 1.

Please amend the paragraph on page 7, lines 14-30 as follows:

Control means 11 may for example comprise a microprocessor or logic circuit with associated memory or storage means which holds a software program which, when executed by control means 11, controls the operation of the humidification system in accordance with instructions set in the software and also in response to external inputs. For example, control means 11 may be provided with input from heater plate 9 so that control means 11 is provided with information on the temperature and/or power usage of the heater plate 9. In addition, control means 11 could be provided with inputs of temperature of the gases flow, for example a temperature sensing means or temperature probe 17 may be provided at or near the patient to indicate the gases temperature being received by the patient and a further temperature probe 18 may be provided to indicate to control means 11 the temperature of the humidified gases flow as it leaves outlet 12 of humidification chamber 4. Furthermore, a flow sensing means or flow probe 19 may be provided anywhere in the breathing circuit ("the breathing circuit" comprises the parts of the humidification apparatus through which the gases flow passes). The flow probe 19 is shown in FIG. 5 in the same position as temperature probe 18 as the two devices may both be provided in one probe as will be described below.

Please amend the Abstract on page 30 as follows (a clean copy of the Abstract is attached):

ABSTRACT

A flow probe for use in a humidification system is ~~disclosed. The flow probe is adapted to be~~ positioned in a humidified gases flow ~~(for example oxygen or anaesthetic gases)~~ such as that which is provided to a patient in a hospital environment. The flow probe is designed to provide both temperature and flow rate sensing of the gases flow by incorporating two sensors ~~(preferably thermistors)~~ into the gases flow. The flow probes are shaped and aligned within the gases flow to enable ~~and the shape and alignment of the probe enables~~ accurate gas flow readings to be taken whilst ~~by~~ reducing the occurrence of condensation on the sensors. ~~A number of possible applications are disclosed wherein the~~ The flow ~~sensor~~ probe can also be ~~is~~ included in a humidification control systems ~~which~~ to provide a patient with a desired humidity level or simplify the amount of user input required to set humidity levels. Furthermore, ~~or wherein~~ the flow ~~sensor~~ probe can ~~provides~~ provide a controller with flow information which may then be used to determine certain~~, possibly dangerous,~~ conditions ~~(such as incorrect flow sensor placement, breathing circuit disconnected, no water in the humidification chamber or humidity out of required limits).~~ that could prove to be dangerous to a patient.